

## BRIEFER ARTICLES

### ERRORS IN DOUBLE NOMENCLATURE

In naming plants having so few well marked individual features as the micro-fungi, it is natural that the appellations should often be taken from the character of the substratum. Among the Uredinales names are frequently derived from the hosts on which they are found; thus *Aecidium Aesculi* is so named because it grows or was believed to grow on *Aesculus*. Many collections of rusts include simply the leaves of the host, or only fragments of leaves or of other parts. Mycologists generally depend upon the collector or some phanerogamic specialist to supply the host determination. The critical taxonomist, however, must be on the alert to detect anything that might possibly invalidate the name applied to the host, as well as to make sure of the correctness of the name given to the parasite. Thus it comes about that the taxonomic uredinologist must deal in double nomenclature, that pertaining both to the host and to the fungus. To misapprehend the identity of either the host or of its unbidden guest may entail deplorable consequences.

The object of this note is to point out a curious error of this sort, which went through the hands of more than half a dozen able taxonomists undetected before passing into print. In the account of the rusts collected by Dr. and Mrs. J. N. ROSE in the Andes, given by the writer in the BOTANICAL GAZETTE for May 1918 (p. 470), 2 new species are proposed, both on Solanaceous hosts. One is *Puccinia Nicotianae* on a species of *Nicotiana*, and the other following is *P. Acnisti* on a species of *Acnistus*. If the descriptions of these 2 species be compared, they will be found to be remarkably similar. In fact, the only important differences are that the first gives measurements for more globose urediniospores, and makes the wall of the teliospore slightly thicker above and verrucose instead of smooth, as compared with the second. These descriptions were drawn up independently by different workers, and were not closely compared until taken in hand by a third investigator after they were published, who undertook to fit them into a general key. Upon reexamining the specimens these differences vanish. The variation in length of urediniospores is greater than the first description states, the teliospores are not really thicker above, and their surface is obscurely verrucose, although sometimes seemingly smooth.

Placing the collections side by side, they were found to look alike, both consisting of a few large leaves well covered with rust. It will be noticed that the published data for the hosts are identical, even to the number, in fact having originally consisted of a single collection, which was separated by the collectors into two parts, one part being distinguished from the other by adding the letter "a" to the number. The material was handled at the herbarium of the National Museum, and one of the two parts was examined also at the Gray Herbarium. Thus at least three highly trained taxonomists passed upon the identity of the hosts, or rather the host, and the three microscopists of the Purdue Agricultural Experiment Station, who passed upon the identity of the rusts, or rather the rust, did their part without a suspicion of anything amiss. It took a seventh man to bring the two descriptions and the sets of material together and point out that only one rust and one host were involved. The two packets of material were subsequently sent to Mr. PAUL C. STANDLEY of the National Museum with a statement of the situation, and were returned with the information that the host was neither *Nicotiana tomentosa* nor *Acnistus arborescens* as published, but was *Acnistus aggregatus* (R. and P.) Miers.

It would have been unnecessary to give a detailed account of this series of errors had the duplicate names of the rust in their fortuitous position on the page been reversed. The American Code of Nomenclature recognizes page position in deciding priority. In this case, however, it may be assumed that duplicate names having been given simultaneously to the same fungus, or as near as it is possible to do so in print, one of them correctly formed and the other glaringly erroneous, the correct name should be maintained and the other treated as a blunder and discarded. This disposition of the case is also in accord with the International Rules of Nomenclature, which give to the author the privilege of choosing between two names of the same date, which subsequently he considers to be conspecific (Article 46). The correct name to include both descriptions, as well as other data, therefore, is *Puccinia Acnisti* Arth., on *Acnistus aggregatus*. Of course this instance has no bearing upon such inappropriate but tenable names as *Puccinia Distichlidis*, at first supposed to be a rust on *Distichlis spicata*, but years later found to be on *Spartina gracilis*, or as *P. Sorghi*, now known never to occur on *Sorghum*.

The same species of fungus, to which this note refers, has been listed in the account of the Uredinales of Costa Rica, where it is correctly given as *Puccinia Acnisti*, and in this case is on *Acnistus arborescens* (Mycologia 10:138).—J. C. ARTHUR, *Purdue University, Lafayette, Ind.*